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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,242	02/24/2004	Nodoka Oishi	04025	1223

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ALEXANDRIA, VA 22314

EXAMINER

LANDAU, MATTHEW C

ART UNIT PAPER NUMBER

2815

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/784,242

Applicant(s)

OISHI ET AL.

Examiner

Matthew Landau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 5,7-9,13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Claims 5, 7-9, 13, and 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 29, 2005.

### *Drawings*

The drawings were received on December 13, 2005. These drawings are acceptable.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashizume (JP 11-298048).

Regarding claims 1 and 2, Figures 3a and 3b of Hashizume disclose a light emitting diode comprising: a base 131 made of heat conductive material and having a heat radiation surface (bottom surface); at least one wire plate 132 made of an insulation material (see paragraph [0028] of English translation) and secured to an upper surface of the base; exposing means for forming an exposed mounting area on the surface of the base; conductive patterns 333 formed on

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the wire plate; a light emitting diode element 11 secured to the base at the mounting area; and connecting means for electrically connecting the light emitting diode element to the conductive patterns.

Regarding claim 3, Figures 3a and 3b of Hashizume disclose the exposing means is a perforated hole formed in the wire plate 132.

Regarding claim 6, Figure 3a of Hashizume discloses an encapsulating member 12 for protecting the light emitting diode element 11.

Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrah et al. (US Pat. 6,498,355, hereinafter Harrah).

Regarding claims 1 and 2, Figure 3 of Harrah discloses a light emitting diode comprising: a base 6 made of heat conductive material (metal) and having a heat radiation surface (bottom surface); at least one wire plate 10 made of an insulation material and secured to an upper surface of the base; exposing means for forming an exposed mounting area on the surface of the base; conductive patterns 8 formed on the wire plate; a light emitting diode element 28 secured to the base at the mounting area; and connecting means (50 and 48) for electrically connecting the light emitting diode element to the conductive patterns.

Regarding claim 3, Figure 3 of Harrah discloses the exposing means is a perforated hole in the wire plate 10.

Regarding claim 4, Figure 3 of Harrah discloses the connecting means (48 and 50) comprises a plurality of lead wires (48 and 50).

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Regarding claim 6, Figure 3 of Harrah discloses an encapsulating member 26 for protecting the light-emitting diode element (col. 4, lines 1-10).

Claims 1-3, 6, and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Jory et al. (US Pat. 6,501,103, hereinafter Jory).

Regarding claims 1 and 2, Figure 4 of Jory discloses a light emitting diode comprising: a base 10 made of heat conductive material and having a heat radiation surface (bottom surface); at least one wire plate 13 made of an insulation material and secured to an upper surface of the base; exposing means for forming an exposed mounting area on the surface of the base; conductive patterns (inherent) formed on the wire plate; a light emitting diode element 12 secured to the base at the mounting area; and connecting means (wire, not labeled) for electrically connecting the light emitting diode element to the conductive patterns. Note that Jory discloses wire plate 13 is a printed circuit board (PCB) (col. 2, lines 1-3). A PCB is inherently made of an insulating material. It is also inherent that conductive patterns exist on the PCB, particularly since the wire shown in Figure 4 must be connected to a conductive trace of some kind.

Regarding claim 3, Figure 4 of Jory discloses the exposing means is a perforated hole in the wire plate 13.

Regarding claim 6, Figure 4 of Jory discloses an encapsulating member 14 for protecting the light-emitting diode element 12.

Regarding claim 10, Figure 4 of Jory discloses a light emitting diode, comprising: base 10 made of a heat conductive material and having a flat plate shape and a heat radiation surface formed on a surface thereof (bottom surface); a wire plate 13 made of an insulation material and secured to an upper surface of the base; exposing means for forming an exposed mounting area on the surface of the base; conductive patterns (inherent patterns and trace 15) secured to the wire plate; a light emitting diode element 12 secured to the base at the mounting area; connecting means (wire, not labeled) for electrically connecting the light emitting diode element to the conductive patterns; a print substrate 2 having conductive patterns (inherent) provided on an underside thereof and secured to the conductive patterns on the wire plate so as to electrically connect both the conductive patterns. Note that Jory discloses wire plate 13 is a printed circuit board (PCB) (col. 2, lines 1-3). A PCB is inherently made of an insulating material. It is also inherent that conductive patterns exist on the PCB, particularly since the wire shown in Figure 4 must be connected to a conductive trace of some kind. It is also inherent that the print substrate 2 has conductive patterns on the underside thereof that connect to the trace 15 in order to complete the electrical connection.

Regarding claim 11, Figure 4 of Jory discloses the print substrate 2 has a hole for discharging the light emitted from the light emitting diode element 12.

Regarding claim 12, Figure 4 of Jory discloses a heat-radiating member 3 secured to an underside of the base 10.

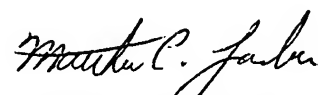
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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (571) 272-1731.

The examiner can normally be reached from 8:30 AM - 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Parker can be reached on (571) 272-2298. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matthew C. Landau

May 22, 2006